

**ABSTRACT**

A switching converter in which an input voltage ( $U_E$ ) can be switched by means  
5 of at least one controlled switch ( $S$ ) to at least one primary winding ( $W_p$ ) of a  
transformer (UET), with a control circuit (AST) for controlling the switch, to which  
control circuit a regulating signal ( $S_R$ ) in the sense of regulating at least one output  
voltage is sent, wherein the power supply of the control circuit (AST) takes place via  
the forward voltage of an auxiliary winding ( $W1$ ) of the transformer, a rectifier ( $D2$ ), a  
10 capacitor ( $C$ ) and a series regulator (LAE), on the one hand, and, on the other hand,  
starting from the input voltage ( $U_E$ ), via a current path ( $R_S$ ) and a storage capacitor  
( $C_s$ ), and the off-state voltage of an auxiliary winding ( $W1$ ;  $W2$ ), which is rectified by  
means of a rectifier ( $D4$ ), is additionally sent to the control circuit (AST) for power  
supply, wherein the rectified off-state voltage is used during the operation for  
15 supplying the control circuit as long as it has a sufficient voltage level.

Figure 2